

**REMARKS**

Claims 18-34 are now in the application. By this Response, claim 28 has been amended to recite a method instead of a use, in accordance with US practice. Claims 18-28 have been withdrawn by the Examiner. No new matter has been added.

The Office Action has required restriction between:

Group I, claims 18-28, drawn to a printing ink; and

Group II, claims 29-34, drawn to an NIR absorber.

Applicants herewith elect Group II, claims 29-34, drawn to an NIR absorber, with traverse.

The Office Action asserts, at page 2, paragraph three, that Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because they lack the same or corresponding special technical features. In particular, the Restriction is based on the assertion that U.S. Patent No. 6,048,387 to Shibahashi et al. suggests a reversible thermochromic composition that can reasonably be considered to correspond to a printing ink as claimed.

Independent claim 18 recites: A printing ink for letterpress and/or offset printing, comprising:

- 5 to 45% by weight of at least one nonpolar solvent with a boiling point of from 200 to 320°C,
- 20 to 70% by weight of binder,
- 5 to 25% by weight of colorant absorbing in the visible spectral range and
- an NIR absorber which has substantially no absorption in the visible spectral range, wherein the solubility of the NIR absorber in the printing ink is at least

0.1% by weight, based on all components of the printing ink, with the proviso that the solubility of the NIR absorber is greater than or equal to the concentration of the NIR absorber in the printing ink.

Preferred embodiments of the NIR absorbers are those recited in claims 21 to 26. Accordingly, a printing ink as claimed comprises a mixture of at least 4 components: a solvent, a binder, a colorant, and an IR-absorber.

Shibahashi suggests a thermochromic composition containing:

- (A) a diazarhodiamine lactone derivative represented by formula (1), which is an electron-donating color-developing organic compound,
- (B) an electron accepting compound, and
- (C) a reaction medium for causing an electron exchange between (A) and (B).

As set forth at col. 6, lines 18-19, and at claim 2 of Shibahashi, the reaction medium (C) is selected from alcohols, esters, ketones, ethers, and acid amides. Butyl stearate, which is an alcohol used in example 1 of Shibahashi, is a polar compound, which, in addition has a boiling point of 186 °C. This is not a suggestion of a nonpolar solvent having a boiling point of from 200 °C to 320 °C.

Further, Shibahashi fails to suggest that component (B) may be an NIR absorber or the use of a binder. Finally, compound (A) is not a colorant but a thermochromic composition that changes its color reversibly within a certain temperature range due to an electron exchange between (A) and (B).

Therefore, Applicants respectfully submit that Shibahashi cannot reasonably be considered to suggest a printing ink, as claimed, and that the pending claims recite a single general inventive concept.

Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 12810-00341-US1 from which the undersigned is authorized to draw.

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Respectfully submitted,

Electronic signature: /Georg M. Hasselmann/  
Georg M. Hasselmann

Registration No.: 62,324  
CONNOLLY BOVE LODGE & HUTZ LLP  
1875 Eye Street, NW  
Suite 1100  
Washington, DC 20006  
(202) 331-7111  
(202) 293-6229 (Fax)  
Attorney for Applicants